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10/783,928	02/20/2004	Tom Lalor	1013-00030	7275

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JEFREY S. SOKOL  
COOK & FRANKE S.C.  
660 EAST MASON STREET  
MILWAUKEE, WI 53202

EXAMINER
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GUILL, RUSSELL L

ART UNIT	PAPER NUMBER
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2123

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/06/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/783,928	<b>Applicant(s)</b> LALOR ET AL.	
	<b>Examiner</b> Russ Guill	<b>Art Unit</b> 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1 - 24 have been examined. Claims 1 - 24 have been rejected.

#### *Specification*

2. The abstract of the disclosure is objected to because the abstract uses the legal phraseology term, "said". Correction is required. See MPEP § 608.01(b).
  - a. Applicant is reminded of the proper language and format for an abstract of the disclosure.
  - b. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.
  - c. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

#### *Claim Rejections - 35 USC § 101*

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1 - 24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

a. Regarding claims 1 and dependent claims, the claim is directed to a computer program product comprising computer readable program code. Broadly interpreted, computer readable program code may be interpreted as source code, which is non-functional descriptive material *per se*, and therefore, is non-statutory. Typically, a claim for a computer program is directed to a computer readable medium on which are recorded computer executable instructions that when executed cause the computer to perform a process.

b. Regarding claims 1 and dependent claims, the claim appears to recite abstract ideas such as translation of instructions, and therefore, in order to be statutory, the claim must have a practical application having a useful, concrete and tangible result. The claim does not appear to have a tangible result needed to support a practical application, and therefore is non-statutory.

c. Regarding claim 16, the claim is directed to a computer program product comprising computer readable program code. Broadly interpreted, computer readable program code may be interpreted as source code, which is non-functional descriptive material *per se*, and therefore, is non-statutory. Typically, a claim for a computer program is directed to a computer readable medium on which are recorded computer executable instructions that when executed cause the computer to perform a process.

d. Regarding claim 16, the claim appears to recite abstract ideas such as translation of instructions, and therefore, in order to be statutory, the claim must have a practical application having a useful, concrete and tangible result. The claim does not appear to have a tangible result needed to support a practical application, and therefore is non-statutory.

e. Regarding claims 17 and dependent claims, the claim appears to recite abstract ideas such as combining commands and actions, and therefore, in order to be statutory, the claim must have a practical application having a useful, concrete and tangible result. The claim does not appear to have a tangible result needed to support a practical application, and therefore is non-statutory.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 3 - 8, 10 - 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beier (U.S. Patent Application Publication 2003/0227453) in view of Lynch (U.S. Patent Application Publication 2003/0106042).

- a. The art of Beier is directed to automatically creating animated 3D scenarios from position and path data (Abstract).
- b. The art of Lynch is directed to graphically modeling a state diagram, generating code to execute the state diagram, and graphically animating the execution of the state diagram (paragraphs [0026], [0035] – [0036]).
- c. The art of Beier and the art of Lynch are analogous art because they both pertain to the art of graphics window programming (Beier, figure 3; and Lynch, paragraphs [0003], [0020]).
- d. Regarding claim 1:
- e. Beier appears to teach:
  - i. computer readable program code configured to: provide for selection of multiple locations within a defined area on the display screen (figure 2, figure 3, and paragraphs [0074] – [0085], especially paragraph [0085] for the specifics of the limitation);
- f. Wheeler does not specifically teach:
  - i. provide for creation of one or more high level computer instructions describing the simulation relative to said locations;
  - ii. provide for translation of said one or more high level computer instructions into low level computer executable instructions necessary to carry out execution of the simulation.
- g. Lynch appears to teach:
  - i. provide for creation of one or more high level computer instructions describing the simulation relative to said locations (paragraphs [0035] – [0036]; since the state diagram was animated, it would have been obvious that the high level C++ instructions were relative to the locations; further, it was common knowledge to use graphical user interface development tools that would take a user developed application window and generate code to create the application window, as shown in the reference by Greg Perry, "Sams Teach Yourself Visual Basic 6 in 21 Days", 1999);

- ii. provide for translation of said one or more high level computer instructions into low level computer executable instructions necessary to carry out execution of the simulation (paragraphs [0035] – [0036]; it would have been obvious that high level computer instructions in C would have been translated into low level executable instructions).
- h. The motivation to use the art of Lynch with the art of Beier would have been the benefits recited in Lynch including that graphical code generators ease the edit-test-debug cycle, and one of the most efficient debugging techniques for graphical code generators involves animation of the graphical user interface (paragraph [0002]).
- i. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Lynch with the art of Beier to produce the claimed invention.
- j. Regarding **claim 3**:
- k. Beier appears to teach:
  - i. The computer program product of claim 1, wherein said one or more high level computer instructions describing the simulation include (a) character instructions assigning object character to one or more of said locations (paragraph [0085]), and (b) movement instructions assigning object movement between two or more of said locations (paragraph [0085]).
- l. Regarding **claim 4**:
- m. Beier appears to teach:
  - i. The computer program product of claim 1, wherein said one or more high level computer instructions describing the simulation include one or more sound instructions describing one or more sounds related to the simulation (paragraph [0089]).
- n. Regarding **claim 5**:

o. Beier appears to teach:

- i. The computer program product of claim 1, wherein said one or more high level computer instructions describing the simulation include one or more speed control instructions to control the speed of said execution of the simulation (paragraphs [0085], [0087]; please note that the time between control points controls the speed).

p. Regarding **claim 6**:

q. Beier appears to teach:

- i. The computer program product of claim 1, wherein said one or more high level computer instructions describing the simulation include one or more delay instructions to delay said execution of the simulation (paragraphs [0085], [0087]; please note that it would have been obvious to insert a delay by controlling the time at each control point).

r. Regarding **claim 7**:

s. Beier does not specifically teach:

- i. The computer program product of claim 1, wherein said one or more high level computer instructions describing the simulation include one or more comment instructions to insert textual comments into the simulation.

t. Lynch appears to teach:

- i. The computer program product of claim 1, wherein said one or more high level computer instructions describing the simulation include one or more comment instructions to insert textual comments into the simulation (paragraph [0021] ("displaying . . . typed text")).

u. Regarding **claim 8**:

v. Beier appears to teach:

- i. The computer program product of claim 1, wherein said one or more high level computer instructions describing the simulation include one or more secondary image instructions to display secondary images related to the simulation (paragraph [0091]; please note that additional characters like cheerleaders can be modeled).



w. Regarding **claim 10**:

x. Beier does not specifically teach:

i. The computer program product of claim 1, wherein said computer readable program code is configured to: provide for manual entry and editing of said high level computer instructions within a defined high level program area on the display screen prior to said translation of said high level computer instructions into said low level computer executable instructions.

y. Lynch appears to teach:

i. The computer program product of claim 1, wherein said computer readable program code is configured to: provide for manual entry and editing of said high level computer instructions within a defined high level program area on the display screen prior to said translation of said high level computer instructions into said low level computer executable instructions (*paragraph [0035]; it would have been obvious that the code could be modified using a text edit screen prior to translation into executable instructions*).

z. Regarding **claim 11**:

aa. Beier appears to teach:

i. The computer program product of claim 1, wherein said computer readable program code is configured to: provide for said execution of the simulation at a predetermined speed; and provide for variation of said predetermined speed (*paragraph [0085] – [0087]; it would have been obvious that variation of speed could be obtained by controlling the time of control points*).

bb. Regarding **claim 15**:

cc. Beier appears to teach:

i. The computer program product of claim 1, wherein said computer readable program code is configured to: provide for importing and display of one or more landscape images into said defined area on the display screen (*figure 2, block element in the*

lower right-side corner labeled "Background Libraries", elements "other visual background" and "stadium, billboard, ...").

8. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Beier as modified by Lynch as applied to claims **1, 3 - 8, 10 - 11 and 15** above, and further in view of Perron (Marc Perron, "Coaching a society of robots in accomplishing joint tasks", 2002, Crossroads, ACM Press, Volume 9, Issue 1, pages 19 - 27).

a. Beier as modified by Lynch teaches computer program product to select multiple screen locations, create high level instructions describing a simulation relative to selected locations, and translating the high level instructions into low level instructions, as recited in claims **1, 3 - 8, 10 - 11 and 15** above.

b. The art of Perron is directed to simulation of a robotic soccer team (page 19, right-side column, first paragraph).

c. The art of Beier and the art of Perron are analogous art because they both pertain to the art of graphically simulating sports team maneuvers (Beier, figure 2; and Perron, figure 4, and page 19, right-side column, first paragraph).

d. Regarding **claim 2**:

e. Beier does not specifically teach:

i. said creation of said one or more high level computer instructions is accomplished automatically following selection of one or more high level commands from a high level command area on the display screen and one or more high level actions from a high level action area on the display screen.

f. Perron appears to teach:

i. said creation of said one or more high level computer instructions is accomplished automatically following selection of one or more high level commands from a high level command area on the display screen and one or more high level actions from a high level action area on the display screen (page 24, figure 4; please refer to the menus of high level commands and actions; and page 23, left-side column, sample code displayed after the first paragraph; and pages 22 - 23; section "Mission Specification in RoboCup Using the Coach Language").

g. The motivation to use the art of Perron with the art of Beier as modified by Lynch would have been the benefits recited in Perron that telerobotics allows complex tasks to be performed at large distances or in hazardous environments without posing any real risk to the operator (page 19, left-side column, first paragraph), and an operators performance can be increased while reducing exposure to hazardous environments (page 19, left-side column, second paragraph).

h. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Perron with the art of Beier as modified by Lynch to produce the claimed invention.

9. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Beier as modified by Lynch applied to claims 1, 3 - 8, 10 - 11 and 15 above, and further in view of Manninen (Tony Manninen, "Interaction forms in multiplayer desktop virtual reality games", 2002, Proceedings of VRIC 2002 Conference, pages 1 - 10).

a. Beier as modified by Lynch teaches computer program product to select multiple screen locations, create high level instructions describing a simulation relative to selected locations, and translating the high level instructions into low level instructions, as recited in claims 1, 3 - 8, 10 - 11 and 15 above.

- b. The art of Manninen is directed to analysis of virtual reality simulations (page 1, Introduction).
- c. The art of Beier and the art of Manninen are analogous art because they both pertain to the art of graphical simulations (Beier, figure 2; and Manninen, page 1, Introduction, and page 5, left-side column, and figure 2).
- d. Regarding **claim 9**:
- e. Beier does not specifically teach:
  - i. The computer program product of claim 8, wherein said secondary images are selected from a group of secondary images comprising hand signal images and retired gunner images.
- f. Manninen appears to teach:
  - i. The computer program product of claim 8, wherein said secondary images are selected from a group of secondary images comprising hand signal images (page 6, left-side column, fifth paragraph that starts with, "Perhaps due . . .") and retired gunner images (page 8, left-side column, second paragraph that starts with, "Artefact related . . .", sniper player role; it would have been obvious that a sniper was a retired gunner).
- g. The motivation to use the art of Manninen with the art of Beier as modified by Lynch would have been that the rich interaction concept model can aid designers by directing the development to support the important areas of interaction (page 10, left-side column, second paragraph).
- h. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Manninen with the art of Beier as modified by Lynch to produce the claimed invention.

Art Unit: 2123

10. Claims 12 - 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beier as modified by Lynch applied to claims 1, 3 - 8, 10 - 11 and 15 above, and further in view of Meadows (U.S. Patent Application Publication 20040147329).

a. Beier as modified by Lynch teaches computer program product to select multiple screen locations, create high level instructions describing a simulation relative to selected locations, and translating the high level instructions into low level instructions, as recited in claims 1, 3 - 8, 10 - 11 and 15 above.

b. The art of Meadows is directed to a personal digital assistant (PDA) for a graphic golf simulation (paragraph [0087] and figure 28).

c. The art of Beier and the art of Meadows are analogous art because they both pertain to the art of graphically simulating sports simulations (Beier, figure 2; and Meadows, figure 25, and paragraph [0087]).

d. Regarding claim 12:

e. Beier does not specifically teach:

i. The computer program product of claim 1, wherein said computer readable program code is configured to: provide for downloading of said high level computer instructions to an external device for storage and execution on said external device.

f. Meadows appears to teach:

i. The computer program product of claim 1, wherein said computer readable program code is configured to: provide for downloading of said high level computer instructions to an external device for storage and execution on said external device (paragraph [0087]; it would have been obvious that code was downloaded to the handheld PDA device).

g. The motivation to use the art of Meadows with the art of Beier as modified by Lynch would have been the advantage recited in Meadows of using large graphic numbers for easy viewing (paragraph [0421]).

h. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Meadows with the art of Beier as modified by Lynch to produce the claimed invention.

i. Regarding claim 13:

j. Beier does not specifically teach:

i. The computer program product of claim 12, wherein said external device is a portable hand held device.

k. Meadows appears to teach:

i. The computer program product of claim 12, wherein said external device is a portable hand held device (paragraph [0087]; a PDA device).

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beier as modified by Lynch and Meadows as applied to claims 12 - 13 above, and further in view of Dresti (U.S. Patent Application Publication 20040210933).

a. Beier as modified by Lynch and Meadows teaches computer program product to select multiple screen locations, create high level instructions describing a simulation relative to selected locations, and translating the high level instructions into low level instructions, as recited in claims 12 - 13 above.

b. The art of Dresti is directed to a personal digital assistant (PDA) having a remote control interface for controlling external devices and a graphical interface (paragraphs [0002] - [0004] and figure 7).

c. The art of Beier and the art of Dresti are analogous art because they both contain to the art of graphical presentations (Beier, figure 2; and Dresti, figure 25, and paragraph [0087]).

d. Regarding claim 14:

e. Beier does not specifically teach:

i. The computer program product of claim 12, wherein said external device is a remote controller device also capable of controlling one or more remote electronic training devices (paragraphs [0002] – [0004]).

f. The motivation to use the art of Dresti with the art of Beier as modified by Lynch and Meadows would have been the benefit recited in Dresti that the device simplifies the operation of a remote control and the remote operation of remote devices (paragraph [0003]), which would have been recognized as a benefit by the ordinary artisan.

g. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Dresti with the art of Beier as modified by Lynch and Meadows to produce the claimed invention.

12. Claims 16 - 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beier (U.S. Patent Application Publication 2003/0227453) in view of Lynch (U.S. Patent Application Publication 2003/0106042), further in view of Perron (Marc Perron, "Coaching a society of robots in accomplishing joint tasks", 2002, Crossroads, ACM Press, Volume 9, Issue 1, pages 19 - 27).

a. The art of Beier is directed to automatically creating animated 3D scenarios from position and path data (Abstract).

b. The art of Lynch is directed to graphically modeling a state diagram, generating code to execute the state diagram, and graphically animating the execution of the state diagram (paragraphs [0026], [0035] – [0036]).

- c. The art of Perron is directed to simulation of a robotic soccer team (page 19, right-side column, first paragraph).
- d. The art of Beier and the art of Lynch are analogous art because they both pertain to the art of graphics window programming (Beier, figure 3; and Lynch, paragraphs [0003], [0020]).
- e. The art of Beier and the art of Perron are analogous art because they both pertain to the art of graphically simulating sports team maneuvers (Beier, figure 2; and Perron, figure 4, and page 19, right-side column, first paragraph).
- f. Regarding claim 16:
- g. Beier appears to teach:
  - i. computer readable program code configured to: provide for selection of multiple locations within a defined area on the display screen (figure 2, figure 3, and paragraphs [0074] – [0085], especially paragraph [0085] for the specifics of the limitation);
- h. Beier does not specifically teach:
  - i. provide for automatic creation of one or more high level computer instructions describing the simulation relative to said locations following selection of one or more high level commands from a high level command area on the display screen and one or more high level actions from a high level action area on the display screen;
  - ii. provide for translation of said one or more high level computer instructions into low level computer executable instructions necessary to carry out execution of the simulation.
- i. Lynch appears to teach:
  - i. provide for creation of one or more high level computer instructions describing the simulation relative to said locations (paragraphs [0035] – [0036]; since the state diagram was animated, it would have been obvious that the high level C++ instructions were relative to the



locations; further, it was common knowledge to use graphical user interface development tools that would take a user developed application window and generate code to create the application window, as shown in the reference by Greg Perry, "Sams Teach Yourself Visual Basic 6 in 21 Days", 1999);

ii. provide for translation of said one or more high level computer instructions into low level computer executable instructions necessary to carry out execution of the simulation (paragraphs [0035] - [0036]; it would have been obvious that high level computer instructions in C would have been translated into low level executable instructions).

j. Perron appears to teach:

i. following selection of one or more high level commands from a high level command area on the display screen and one or more high level actions from a high level action area on the display screen (page 24, figure 4; please refer to the menus of high level commands and actions);

k. The motivation to use the art of Lynch with the art of Beier would have been the benefits recited in Lynch including that graphical code generators ease the edit-test-debug cycle, and one of the most efficient debugging techniques for graphical code generators involves animation of the graphical user interface (paragraph [0002]).

l. The motivation to use the art of Perron with the art of Beier would have been the benefits recited in Perron that telerobotics allows complex tasks to be performed at large distances or in hazardous environments without posing any real risk to the operator (page 19, left-side column, first paragraph), and an operators performance can be increased while reducing exposure to hazardous environments (page 19, left-side column, second paragraph).

m. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Lynch and the art of Perron with the art of Beier to produce the claimed invention.

n. Regarding **claim 17**:

o. Beier appears to teach:

- i. running a computer program product on a computer connected to the display screen, said computer program product designed for developing and directing simulations (figure 2, figure 3, and paragraphs [0074] – [0085], especially paragraph [0085] for the specifics of the limitation);
- ii. using said computer program product to select multiple locations within a defined area on the display screen (figure 2, figure 3, and paragraphs [0074] – [0085], especially paragraph [0085] for the specifics of the limitation);

p. Beier does not specifically teach:

- i. using said computer program product to select one or more high level commands from a high level command area on the display screen;
- ii. using said computer program product to select one or more high level actions from a high level action area on the display screen;
- iii. using said computer program product to automatically combine said selected one or more high level commands and said selected one or more high level actions to create one or more high level computer instructions describing the simulation relative to said locations.

q. Lynch appears to teach:

- i. create one or more high level computer instructions describing the simulation relative to said locations (paragraphs [0035] – [0036]; since the state diagram was animated, it would have been obvious that the high level C++ instructions were relative to the locations);

r. Perron appears to teach:

- i. using said computer program product to select one or more high level commands from a high level command area on the display screen (page 24, figure 4; please refer to the menus of high level commands and actions);

- ii. using said computer program product to select one or more high level actions from a high level action area on the display screen (page 24, figure 4; please refer to the menus of high level commands and actions);
  - iii. using said computer program product to automatically combine said selected one or more high level commands and said selected one or more high level actions to create one or more high level computer instructions describing the simulation relative to said locations (page 23, left-side column, sample code displayed after the first paragraph; and pages 22 - 23, section "Mission Specification in RoboCup Using the Coach Language").
- s. Regarding **claim 18**:
- t. Lynch appears to teach:
- i. The method of claim 17, including the step of using said computer program product to translate said one or more high level computer instructions into low level computer executable instructions necessary to carry out execution of the simulation (paragraphs [0035] - [0036]; it would have been obvious that the C code was translated into low level computer instructions).
- u. Regarding **claim 19**:
- v. Beier appears to teach:
- i. The method of claim 17, wherein said one or more high level computer instructions describing the simulation include (a) character instructions assigning object character to one or more of said locations (paragraph [0085]), and (b) movement instructions assigning object movement between two or more of said locations (paragraph [0085]).
- w. Regarding **claim 20**:
- x. Beier appears to teach:
- i. said one or more high level computer instructions describing the simulation are selected from a group of high level computer instructions consisting of: one or more sound instructions describing one or more sounds related to the simulation (paragraph [0089]), one or more speed control instructions to control the speed of said execution of

Art Unit: 2123

the simulation (paragraphs [0085], [0087]; please note that the time between control points controls the speed), one or more delay instructions to delay said execution of the simulation (paragraphs [0085], [0087]; please note that it would have been obvious to insert a delay by controlling the time at each control point), one or more secondary image instructions to display secondary images related to the simulation, (figure 2, block element in the lower right-side corner labeled "Background Libraries", elements "other visual background" and "stadium, billboard, . . .") and combinations thereof (figure 2, Chart Editor).

y. Beier does not specifically teach:

i. one or more comment instructions to insert textual comments into the simulation.

z. Lynch appears to teach:

i. one or more comment instructions to insert textual comments into the simulation (paragraph [0021] ("displaying . . . typed text")).

aa. Regarding **claim 21**:

bb. Beier appears to teach:

i. The method of claim 17, including the step of using said computer program product to import and display one or more landscape images into said defined area on the display screen (figure 2, block element in the lower right-side corner labeled "Background Libraries", elements "other visual background" and "stadium, billboard, . . .").

13. Claims 22 - 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beier as modified by Lynch and Perron as applied to claims 16 - 21 above, further in view of Playmaker (two pages of descriptive material for the Playmaker software, September 2003, obtained from the Wayback Machine of the Internet Archive at [www.archive.org](http://www.archive.org) from the archive made September 19, 2003).

- a. The art of Beier as modified by Lynch and Perron teaches a method for developing and directing a simulation displayable on a display screen, as recited in claims 16 - 21 above.
- b. The art of Playmaker is directed to football simulation and chalkboard editor (*first and second pages*).
- c. The art of Beier and the art of Playmaker are analogous art because they both pertain to the art of a chalkboard editor (*Beier, figure 3; and Playmaker, first and second pages*).
- d. Regarding **claim 22**:
- e. Beier does not specifically teach:
  - i. The method of claim 17, including the step of downloading said high level computer instructions to an external device, wherein said external device has been configured to translate said one or more high level computer instructions into low level computer executable instructions necessary to carry out execution of the simulation.
- f. Playmaker appears to teach:
  - i. the step of downloading said high level computer instructions to an external device (*first page, left-side column labeled "Playmaker for Palm", fifth bullet item, "Full PC-to-PDA playbook transfer for cross-platform compatibility"*).
- g. Lynch appears to teach:
  - i. wherein said external device has been configured to translate said one or more high level computer instructions into low level computer executable instructions necessary to carry out execution of the simulation (*paragraphs [0035] - [0036]*).
- h. The motivation to use the art of Playmaker with the art of Beier as modified by Lynch and Perron would have been the knowledge of the ordinary artisan that downloading the system to a palm held computer would allow the

simulation to be portable and used anywhere, which would have been a benefit to increase profits.

i. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Playmaker with the art of Beier as modified by Lynch and Perron to produce the claimed invention.

j. Regarding **claim 23**:

k. Beier does not specifically teach:

i. The method of claim 22, wherein said external device is a portable handheld device.

l. Playmaker appears to teach:

i. The method of claim 22, wherein said external device is a portable handheld device (first page, left-side column labeled "Playmaker for Palm").

14. **Claim 24** is rejected under 35 U.S.C. 103(a) as being unpatentable over Beier as modified by Lynch, Perron and Playmaker as applied to claims **22 - 23** above, further in view of Dresti (U.S. Patent Application Publication 20040210933).

a. The art of Beier as modified by Lynch, Perron and Playmaker teaches a method for developing and directing a simulation displayable on a display screen, as recited in claims **22 - 23** above.

b. The art of Dresti is directed to a personal digital assistant (PDA) having a remote control interface for controlling external devices and a graphical interface (paragraphs [0002] - [0004] and figure 7).

c. The art of Beier and the art of Dresti are analogous art because they both contain to the art of graphical presentations (Beier, figure 2; and Dresti, figure 25, and paragraph [0087]).

d. Regarding claim 24:

e. Beier does not specifically teach:

i. The method of claim 22, wherein said external device is a remote controller device also capable of controlling one or more remote electronic training devices (paragraphs [0002] – [0004]).

f. The motivation to use the art of Dresti with the art of Beier as modified by Lynch, Perron and Playmaker would have been the benefit recited in Dresti that the device simplifies the operation of a remote control and the remote operation of remote devices (paragraph [0003]), which would have been recognized as a benefit by the ordinary artisan.

g. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Dresti with the art of Beier as modified by Lynch, Perron and Playmaker to produce the claimed invention.

15. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the Applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. The entire reference is considered to provide disclosure relating to the claimed invention.

*Conclusion*

16. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure:

- a. Chris Tacke et al.; "eMbedded Visual Basic: Windows CE and Pocket PC Mobile Applications", 2002, Sams, four unnumbered pages; teaches Visual Basic interpreter that runs on a Pocket PC handheld computer.
- b. Jeffry M. Pickering et al.; "The Coach's Playbook", May 1999, Brown University, eight unnumbered pages; teaches a simulation method of selecting multiple locations on a display.
- c. Ronald A. Metoyer et al.; "Animating Athletic Motion Planning By Example", 2000, Proceedings of Graphics Interface conference 2000, eight unnumbered pages; teaches a simulation method of selecting multiple locations on a display.
- d. Wheeler (U.S. Patent Application Publication 20030135355) teaches graphically selecting locations in a display, placing symbols, and generating simulation code.
- e. Nolan (U.S. Patent Number 6,675,366) teaches graphically selecting locations in a display, placing symbols, and generating simulation code.
- f. Roytman (U.S. Patent Number 6,273,724) teaches a high level instruction generator for a graphic simulation.
- g. Shur (U.S. Patent Number 5,636,920) teaches a drill editor;
- h. Kossiakoff (U.S. Patent Number 4,315,315) teaches generating low level instructions from high level instructions.
- i. Kodosky (U.S. Patent Number 7,010,470) teaches creating a graphic program, then generating a simulation program.



- j. Kodosky (U.S. Patent Application Publication 20020083413) teaches generating a graphic program from a state diagram.
- k. Greg Perry, "Sams Teach Yourself Visual Basic 6 in 21 Days", 1999, Sams Publishing, pages i, ii, 33 - 60; teaches an application code generator for a Visual Basic graphic interface application.

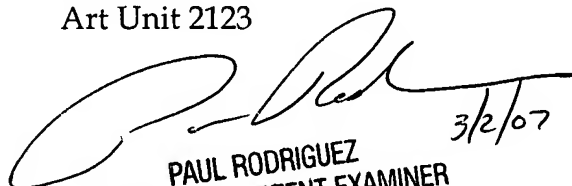
17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russ Guill whose telephone number is 571-272-7955. The examiner can normally be reached on Monday - Friday 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RG

Russ Guill  
Examiner  
Art Unit 2123

  
PAUL RODRIGUEZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100  
3/2/07